

# Transfer Credit Ohio

THE OHIO DEPARTMENT OF HIGHER EDUCATION

## « Guaranteed Transfer Pathways »

### Ohio Guaranteed Transfer Pathways Endorsement Survey - Computer Science, Information Technology, and Information Systems

#### Background

Ohio Revised Code 3333.16(D) calls for the Chancellor of the Ohio Department of Higher Education to update and implement the policies and procedures by not later than December 1, 2018 to ensure that any associate degree offered at a public institution of higher education may be transferred and applied to a bachelor degree program in an equivalent field at any other public institution of higher education without unnecessary duplication or institutional barriers.

The Ohio Articulation and Transfer Network (OATN) has been working with faculty content experts from Ohio's two- and four-year public institutions of higher education since Fall 2019 to develop pathways in Computer Science, Information Technology, and Information Systems. The faculty panel drafted preliminary pathways but determined that Transfer Assurance Guide (TAG) guaranteed coursework was needed to support the pathways in each of the three areas. They proposed courses, and these recommendations led to the formation of TAG faculty panels that wrote learning outcomes for the new TAG coursework over the next two years. In Spring 2023 with new TAG courses in hand, the faculty panel was able to reconvene and finally finish their pathway development.

The following survey questions will ask if you agree with the proposed pathways.

Only one representative from each institution should complete the survey. This institutional response should be coordinated through the CAO/Provost's Office.

Please complete the survey as soon as possible but **no later than Friday, May 26, 2023.**

Should you have any questions regarding this endorsement survey, please contact Dr. Candice Grant, Senior Director of the Ohio Guaranteed Transfer Pathways, at [cgrant@highered.ohio.gov](mailto:cgrant@highered.ohio.gov).

\* 1. Please provide your contact information:

**Name:**

**Institution:**

**Title:**

**Email Address:**

**Phone Number:**

2. For which pathway are you providing feedback/endorsement? (This survey may be completed multiple times if you offer more than one of these majors/pathways)

- ☐ Computer Science
- ☐ Information Systems
- ☐ Information Technology
- ☐ Do not offer any of these programs (universities) or will not offer any of these transfer pathway (community colleges)



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### Computer Science

**Please review the following proposed pathway for an Associate of Arts or Associate of Science leading to a bachelor's degree in Computer Science:**

**Please note that the Data Structures TAG course is in the process of being developed and institutions will not be required to have a Data Structures course to offer this pathway until the TAG is in place.**

There are different computing disciplines: Computer Science emphasizes mathematical concepts related to designing new technology. Information Systems focuses on application of the information aspects of information technology, whereas Information Technology emphasizes the application of the technology itself more than the information it conveys.

Computer Science involves design and innovation developed from computing principles. It focuses on the theoretical foundations of computing, algorithms, and programming techniques, as applied to operating systems, artificial intelligence, informatics and other emerging areas. Computer scientists should be prepared to work in a broad range of positions involving tasks from theoretical work to software development. Computer science programs typically require significant mathematical background.

GENERAL EDUCATION REQUIREMENTS/OHIO TRANSFER 36		Credit Hours
ENGLISH COMPOSITION AND ORAL COMMUNICATION:		3
Course 1:	First Writing (TME001) course	3
MATHEMATICS, STATISTICS, AND LOGIC:		4-5
Course 1:	Calculus I (TMM005) <sup>1</sup>	4-5
ARTS AND HUMANITIES:		6
+ Course 1:	Any Ohio Transfer 36 approved Arts and Humanities course	3
+ Course 2:	Any Ohio Transfer 36 approved Arts and Humanities course	3
SOCIAL AND BEHAVIORAL SCIENCES:		6
Course 1:	Any Ohio Transfer 36 approved Social and Behavioral Sciences course	3
Course 2:	Any Ohio Transfer 36 approved Social and Behavioral Sciences course	3
NATURAL SCIENCES:		7-10
Course 1:	General Chemistry I or Calculus-based Physics I (OSC016) <sup>2</sup>	4-5
Course 2:	Any Ohio Transfer 36 approved Natural Sciences course <sup>2</sup>	3-5
ADDITIONAL CREDITS:		10-12
Course 1:	Calculus II (TMM006)	4-5
Course 2:	Public Speaking (OCM013), Oral Communication, or Second Writing (TME002) course	3
Course 3:	Ohio Transfer 36 approved elective [Recommended: Introduction to Ethics (OAH046) or Introduction to Logic (OAH061)]	3
GENERAL EDUCATION/OHIO TRANSFER 36 TOTAL:		36-42
Advising Notes: Where it indicates "Any Ohio Transfer 36 approved," students should work closely with their advisors. (+) indicates that the courses chosen should be from two different areas within that category. <sup>1</sup> A prerequisite may be needed for a student to reach Calculus I (TMM005). <sup>2</sup> The Ohio State University requires Physics. The University of Cincinnati requires Chemistry. Some institutions require both along with biology. Check with your academic advisor and your receiving institution to determine the appropriate science courses.		

PRE-MAJOR/BEGINNING MAJOR		Credit Hours
Course 1:	Discrete Mathematics (TMM023)	3-4
Course 2:	Computer Science I (OSC001)	3-4
Course 3:	Computer Science II (OSC002)	3-4
Course 4:	Data Structures (TAG Forthcoming)	3-4
PRE-MAJOR/BEGINNING MAJOR TOTAL:		12-16

OTHER RECOMMENDATIONS		Credit Hours
Courses:	Electives (Recommended: Introduction to Computer Science if offered, Elementary Linear Algebra (OMT019), and/or Computer Organization/Architecture)	7-12
OTHER RECOMMENDATIONS TOTAL:		7-12
Advising Notes: <sup>1</sup> Additional recommended pre-major/major coursework is institution specific. Requirements may vary by institution. Consult with your academic advisor and your receiving institution to determine an appropriate program of study.		

ASSOCIATE DEGREE	Total Credit Hours
ASSOCIATE DEGREE TOTAL:	60-65

\* 3. Do you endorse the proposed Computer Science pathway?

☐ Yes

☐ No

Comments:



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Information Systems

**Please review the following proposed pathway for an Associate of Arts or Associate of Science leading to a bachelor's degree in Information Systems:**

There are different computing disciplines: Computer Science emphasizes mathematical concepts related to designing new technology. Information Systems focuses on application of the information aspects of information technology, whereas Information Technology emphasizes the application of the technology itself more than the information it conveys.

Information Systems involves the application of computing principles to processes in business or other domain areas, bridging the technical and management fields. It focuses on the design, implementation and testing of information systems as applied to business processes such as payroll, human resources, corporate databases, data warehousing and mining, ecommerce, finance, customer relations management, transaction processing, and data-driven decision-making and executive support. Information systems professionals are able to analyze information requirements and processes in business or other domain areas and to design systems that are aligned with organizational goals. Information System programs typically contain "information systems" as part of the name under a variety of labels that reflect the nature of the program.

GENERAL EDUCATION REQUIREMENTS/OHIO TRANSFER 36		Credit Hours
<b>ENGLISH COMPOSITION AND ORAL COMMUNICATION:</b>		<b>3</b>
Course 1:	First Writing (TME001) course	3
<b>MATHEMATICS, STATISTICS, AND LOGIC:</b>		<b>3</b>
Course 1:	Introductory Statistics (TMM010) or Business Statistics (OBU013) for business domain area	3
<b>ARTS AND HUMANITIES:</b>		<b>6</b>
+ Course 1:	Any Ohio Transfer 36 approved Arts and Humanities course	3
+ Course 2:	Any Ohio Transfer 36 approved Arts and Humanities course	3
<b>SOCIAL AND BEHAVIORAL SCIENCES:</b>		<b>6</b>
Course 1:	Any Ohio Transfer 36 approved Social and Behavioral Sciences course or Microeconomics (OSS004) for business domain area	3
Course 2:	Any Ohio Transfer 36 approved Social and Behavioral Sciences course (except economics if taken above)	3
<b>NATURAL SCIENCES:</b>		<b>6-7</b>
Course 1:	Any Ohio Transfer 36 approved Natural Sciences course with lab	3-4
Course 2:	Any Ohio Transfer 36 approved Natural Sciences course	3
<b>ADDITIONAL CREDITS:</b>		<b>12</b>
Course 1:	Public Speaking (OCM013), Oral Communication, or Second Writing (TME002) course	3
Course 2:	Any Ohio Transfer 36 approved elective or Macroeconomics (OSS005) for business domain area	3
Course 3:	Any Ohio Transfer 36 approved elective	3
Course 4:	Any Ohio Transfer 36 approved elective	3
<b>GENERAL EDUCATION/OHIO TRANSFER 36 TOTAL:</b>		<b>36-37</b>
Advising Notes: Where it indicates "Any Ohio Transfer 36 approved," students should work closely with their advisors. (+) indicates that the courses chosen should be from two different areas within that category.		

PRE-MAJOR/BEGINNING MAJOR		Credit Hours
Course 1:	Introduction to Programming (OIT001)	3
Course 2:	Systems Analysis and Design (OIS002)	3
Course 3:	Introduction to Database Administration/Management (OIS001)	3
Course 4:	Information Technology/Information Systems Project Management (OIS003)	3
PRE-MAJOR/BEGINNING MAJOR TOTAL:		12

OTHER RECOMMENDATIONS		Credit Hours
Courses:	Electives (For business domain area, recommended electives include Business Calculus (TMM013) or Calculus (TMM005), Introduction to Financial Accounting (OBU010), Introduction to Managerial Accounting (OBU011), Principles of Marketing (OBU006), Management and Organizational Behavior (OBU012)) <sup>1</sup>	10-12
OTHER RECOMMENDATIONS TOTAL:		10-12
Advising Notes: <sup>1</sup> Additional recommended pre-major/major coursework is institution specific. Requirements may vary by institution. Consult with your academic advisor and your receiving institution to determine an appropriate program of study.		

ASSOCIATE DEGREE	Total Credit Hours
ASSOCIATE DEGREE TOTAL:	60-65

4. Do you endorse the proposed Information Systems pathway?

☐ Yes

☐ No

Comments:





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Information Technology

**Please review the following proposed pathway for an Associate of Arts or Associate of Science leading to a bachelor's degree in Information Technology:**

There are different computing disciplines: Computer Science emphasizes mathematical concepts related to designing new technology. Information Systems focuses on application of the information aspects of information technology, whereas Information Technology emphasizes the application of the technology itself more than the information it conveys.

Information Technology involves the design, implementation and maintenance of technology solutions and support for users of such systems. It focuses on hardware and software solutions as applied to networks, security, client-server and mobile computing, web applications, multimedia resources, communications systems, and the planning and management of the technology lifecycle. Information technology professionals are able to work effectively in the planning, implementation, configuration, and maintenance of an organization's technology infrastructure.

GENERAL EDUCATION REQUIREMENTS/OHIO TRANSFER 36		Credit Hours
ENGLISH COMPOSITION AND ORAL COMMUNICATION:		3
Course 1:	First Writing (TME001) course	3
MATHEMATICS, STATISTICS, AND LOGIC:		3
Course 1:	Introductory Statistics (TMM010) <sup>1</sup>	3
ARTS AND HUMANITIES:		6
+ Course 1:	Any Ohio Transfer 36 approved Arts and Humanities course	3
+ Course 2:	Any Ohio Transfer 36 approved Arts and Humanities course	3
SOCIAL AND BEHAVIORAL SCIENCES:		6
Course 1:	Any Ohio Transfer 36 approved Social and Behavioral Sciences course	3
Course 2:	Any Ohio Transfer 36 approved Social and Behavioral Sciences course	3
NATURAL SCIENCES:		6-7
Course 1:	Any Ohio Transfer 36 approved Natural Sciences course with lab	3-4
Course 2:	Any Ohio Transfer 36 approved Natural Sciences course	3
ADDITIONAL CREDITS:		12
Course 1:	Public Speaking (OCM013), Oral Communication, or Second Writing (TME002) course	3
Course 2:	Any Ohio Transfer 36 approved elective	3
Course 3:	Any Ohio Transfer 36 approved elective	3
Course 4:	Any Ohio Transfer 36 approved elective	3
GENERAL EDUCATION/OHIO TRANSFER 36 TOTAL:		36-37
Advising Notes: Where it indicates "Any Ohio Transfer 36 approved," students should work closely with their advisors. (+) indicates that the courses chosen should be from two different areas within that category. <sup>1</sup> The University of Cincinnati requires Pre-Calculus and Discrete Mathematics.		

PRE-MAJOR/BEGINNING MAJOR		Credit Hours
Course 1:	Introduction to Networking (CTIT002)	3
Course 2:	Introduction to Cybersecurity (OIT005)	3
Course 3:	Introduction to Programming (OIT001)	3
Course 4:	System Administration (OIT004)	3
Course 5:	Introduction to Database Administration/Management (OIS001)	3
Course 6:	Introduction to Web Development (OIT003)	3
Course 7:	Information Technology/Information Systems Project Management (OIS003)	3
PRE-MAJOR/BEGINNING MAJOR TOTAL:		21

OTHER RECOMMENDATIONS		Credit Hours
Courses:	Electives (Recommended: Introduction to Geographic Information Systems (OSS051) or a course in Human Computer Interaction) <sup>1</sup>	3-6
OTHER RECOMMENDATIONS TOTAL:		3-6
Advising Notes: <sup>1</sup> Additional recommended pre-major/major coursework is institution specific. Requirements may vary by institution. Consult with your academic advisor and your receiving institution to determine an appropriate program of study.		

ASSOCIATE DEGREE	Total Credit Hours
ASSOCIATE DEGREE TOTAL:	60-65

5. Do you endorse the proposed Information Technology Pathway?

- ☐ Yes
- ☐ No

Comments:



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Thank You

**Thank you for completing the survey.**